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| APPLICATION NO.                                                                | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--------------------------------------------------------------------------------|-------------|----------------------|-------------------------|------------------|
| 10/088,102                                                                     | 07/15/2002  | Stefan Hlibowicki    | 3419-516 HSF            | 5034             |
| 1059 7590 06/07/2004                                                           |             |                      | EXAMINER                |                  |
| BERESKIN AND PARR                                                              |             |                      | LEE, PING               |                  |
| SCOTIA PLAZA 40 KING STREET WEST-SUITE 4000 BOX 401 TORONTO, ON M5H 3Y2 CANADA |             |                      | ART UNIT                | PAPER NUMBER     |
|                                                                                |             |                      | 2644                    |                  |
|                                                                                |             |                      | DATE MAILED: 06/07/2004 | ₄ /∂             |

Please find below and/or attached an Office communication concerning this application or proceeding.

| - 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Application No.                                                                                                                                                                                                              | Applicant(s)                                                                                         |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--|--|--|--|
| Office Antique Occurrence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 10/088,102                                                                                                                                                                                                                   | HLIBOWICKI ET AL.                                                                                    |  |  |  |  |
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Examiner                                                                                                                                                                                                                     | Art Unit                                                                                             |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Ping Lee                                                                                                                                                                                                                     | 2644                                                                                                 |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | pears on the cover sheet with the c                                                                                                                                                                                          | orrespondence address                                                                                |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be tin<br>y within the statutory minimum of thirty (30) day<br>will apply and will expire SIX (6) MONTHS from<br>c, cause the application to become ABANDONE                        | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                              |                                                                                                      |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on 24 Ju                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ulv 2003.                                                                                                                                                                                                                    |                                                                                                      |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | _ `                                                                                                                                                                                                                          |                                                                                                      |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.            |                                                                                                      |  |  |  |  |
| Disposition of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                              |                                                                                                      |  |  |  |  |
| 4) ⊠ Claim(s) <u>1-16</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-16</u> is/are rejected. 7) □ Claim(s) is/are objected to.                                                                                                                                                                                                                                                                                                                                                                                 | <ul> <li>✓ Claim(s) 1-16 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>☐ Claim(s) is/are allowed.</li> <li>✓ Claim(s) 1-16 is/are rejected.</li> </ul> |                                                                                                      |  |  |  |  |
| Application Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                              |                                                                                                      |  |  |  |  |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.                                                                                                                                                                                                                                                                                                                              | epted or b) objected to by the to drawing(s) be held in abeyance. See tion is required if the drawing(s) is obj                                                                                                              | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d).                                                 |  |  |  |  |
| Priority under 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                              |                                                                                                      |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority document</li> <li>2. Certified copies of the priority document</li> <li>3. Copies of the certified copies of the priority application from the International Bureau</li> <li>* See the attached detailed Office action for a list</li> </ul>                                                                                                                                                                                                               | s have been received.<br>s have been received in Application<br>rity documents have been receive<br>u (PCT Rule 17.2(a)).                                                                                                    | on No ed in this National Stage                                                                      |  |  |  |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | _                                                                                                                                                                                                                            |                                                                                                      |  |  |  |  |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date</li> </ol>                                                                                                                                                                                                                                                                                                                                                                       | 4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:                                                                                                                                                |                                                                                                      |  |  |  |  |

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### **DETAILED ACTION**

#### Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the mailing address of each inventor. A mailing address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing address should include the ZIP Code designation. The mailing address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

It does not identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either on an application data sheet or supplemental oath or declaration.

2. Receipt is acknowledged of papers filed under 35 U.S.C. 119 (a)-(d) based on an application filed in Canada on 9/22/1999. Applicant has not complied with the requirements of 37 CFR 1.63(c), since the oath, declaration or application data sheet does not acknowledge the filing of any foreign application. A new oath, declaration or application data sheet is required in the body of which the present application should be identified by application number and filing date.

## Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 6, "the first speaker subassembly" and " the second speaker subassembly" lack clear antecedent basis.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 7. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenberger in view of Hirasawa.

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Regarding claims 1-3, 11, Greenberger shows the first (40) and second speaker (any of 20, 22, 24, 26) assemblies and coupling means (cables and room). Although not explicitly shown, every second speaker inherently has its own audio response characteristics different from the other speakers. Greenberger shows that each second speaker assembly has its own function which will produce signal in different frequency response and different audio content. Greenberger fails to show the switch means in an equalization unit.

Hirasawa teaches that there are several speaker arrangements for listening to the sound from a TV. Figs. 1-3 shows various embodiments. Hirasawa teaches an equalization unit with switch means for generating different outputs with different speaker configurations. Thus, it would have been obvious to one of ordinary skill in the art to modify Greenberger's system in view of Hirasawa by selectively connecting the second speaker assembly to the first speaker assembly (40) and changing the equalization corresponding to the selection in order to allow the user to have more flexibility of the physical arrangement of the speaker system and the lowering the cost of requiring to have four speakers.

Regarding claim 4, although not explicitly shown, the cable inherently has a pair of electrical connections.

Regarding claim 5, although not explicitly shown, the cable inherently has mechanical connections for fixing the cable to the first and second speaker assemblies in order to integral the first and second speaker assemblies into an audio reproduction unit.

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Regarding claim 6, Greenberger shows, in Fig. 8, two sockets (plugs) on the first speaker assembly. Although not explicitly shown, the wires on the second speaker assembly (22 and 24, for example) inherently have two complementary sockets to providing mechanical connection (fixed pins into the sockets) and electrical connections (transmitting audio signal).

Regarding claims 7, 14 and 16, Greenberger in view of Hirasawa has the claimed amplification and equalization circuit.

Regarding claim 8, the claimed fixed filter mode reads on the embodiment as taught in Hirasawa (e.g. Fig. 3) when the user does not push any button, the claimed manual mode reads on the embodiment in Hirasawa when the user push the button.

Regarding claim 9, Hirasawa teaches the amplification circuit (3, 5, 17, 20) and equalization circuit (2, 16, 19).

Regarding claim 10, the claimed output section reads on 2 in Fig. 2a of Hirasawa for having parameters relating to a desired loudspeaker response (left and right channels are intended for left and right speakers), the claimed at least one additional section reads on elements 16, 19, 17, 20 of Hirasawa having parameters corresponding to a desired target response (desired center and/or surround channel) and parameters of a known second speaker system (whether the center and/or surround speakers have been connected to the system). Since Greenberger shows the equalization circuit having parameters related to the response characteristics of the low frequency speaker (col. 11, lines 29-31, 59-61), Greenberger in view of Hirasawa teaches the claimed equalization circuit.

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Regarding claim 12, Hirasawa teaches the section with fixed parameters (16, 19) and a section including manual control (17, 20).

Regarding claim 13, Hirasawa teaches the subtraction filters (2 in Fig. 2a; the L, R, C, S are derived based on subtraction and addition).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 703-305-4865.

The examiner can normally be reached on Monday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rimary Examiner

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